

I-Wheel™ Tandem Sub Saves 84 Hours Operating Time

Objectives

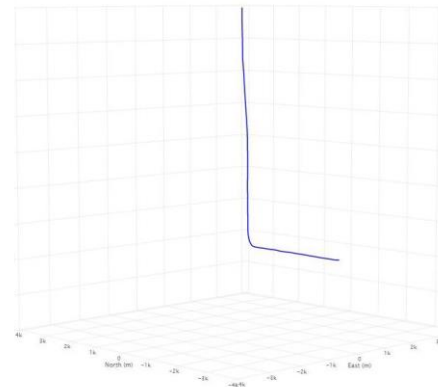
- A client in Texas wanted to deploy a tool string for an oriented perforating pump down operation involving over 127 runs. To avoid damage to the fiber and control lines, the tool string needed to maintain an orientation within a 20° window. A means of optimally orienting the tool string and reducing friction was required.

Our Approach

- The I-Wheel tandem sub reduces friction when deploying tool strings into horizontal wells. As the I-Wheel sub can rotate around the tandem sub shaft, it dramatically reduces the torque required to orient the tool string. This feature assists with rotating the guns to shoot in the desired orientation. An additional benefit of the I-Wheel tandem sub is the lift provided along the tool string. Lifting the tool string off the low side of the well greatly reduces sensitivity to debris and facilitates running in hole and pulling out of hole.

Value to Customer

- Weatherford recommended strategically placed the I-Wheel tandem sub throughout the gun strings deployed in all 127 runs to ensure successful orientation.
- The first-time success rate for gun orientation in earlier operations without the I-Wheel tandem sub was only 50%. Using the I-Wheel tandem sub in the string resulted in the guns being oriented correctly on the first attempt 95% of the time.
- Remedial activity to correct unsuccessful gun orientation typically requires significant additional operating time, pumping time, and consequently higher volumes of fluid usage. This results in significantly increased cost to the client. Ultimately, the I-Wheel tandem sub saved the client 84 hours of operating time and logistical benefits.
- Method now adopted as standard operating procedure for future customer wells.



SMART Planner model of well profile. Total depth of the well was 14,900ft / 4542m

LOCATION

North America

PRODUCTS/SERVICES

- I-Wheel tandem sub

